

Customer No.: 31561
Docket No.: 12707-US-PA
Application No.: 10/708,876

AMENDMENTS

In The Claims

1-5. (canceled)

6. (previously presented) A method for starting-up a motor having multiple stator windings and a rotor, comprising:

providing a current to a first winding and a second winding to excite a predefined initial excitation phase and allowing a third winding to be floating;

masking a time period to reach a state with reduced parasitic detection;

from the predefined initial excitation phase being currently excited, commutating to a next first excitation phase, which is adjacent to the predefined initial excitation phase in a predetermined sequence of excitation phases, if a zero-crossing point of BEMF for the third winding occurs in the third winding within a maximum startup time;

commutating to a next second excitation phase after commutating to the next first excitation phase when a zero-crossing point of BEMF of the second winding has been detected;

commutating to a next third excitation phase, which is functionally shifted by two phase-intervals from the predefined initial excitation phase if no zero crossing point of BEMF of the third winding occurs in the third winding within the maximum startup time; and

commutating to a next fourth excitation phase after commutating to the next third excitation phase when a zero-crossing point of BEMF of the first winding has been detected.

7. (original) The method of claim 6, wherein in the step of commutating to the next first excitation phase, a level change of the BEMF is also detected.

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8. (original) The method of claim 6, wherein in the step of commutating to the next fourth excitation phase, the zero-crossing point is a negative-going zero-crossing point.

9. (original) The method of claim 6, wherein when the first, second, third windings are respectively denoted by A, B, and C, the predefined initial phase is the excitation phase AB_.

10. (original) The method of claim 9, wherein when the step of commutating to the second excitation phase or the step of commutating to the fourth excitation phase has finished, the method for starting-up then exits.

11. (original) The method of claim 9, wherein the predefined initial excitation phase is AB_, the next first excitation phase is AC_, the next second excitation phase is BC_, the next third excitation phase is BC_, and the fourth excitation phase is BA_.